AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A display panel drive for tone-driving, responding to pixel data based on a video signal, a display panel in which a field display period of the video signal is constituted by a plurality of subfields, and pixel cells each carrying a pixel for n (where n is a natural number) display lines are arranged, the display panel drive comprising:

a multi-grayscale component for deriving multi-grayscale pixel data by adding each different offset value to the pixel data corresponding to a display line group including [M · (k-1)+1]th display lines (where M is a natural number, and k is a natural number of n/M or smaller) of the display panel, a display line group including [M · (k-1)+2]th display lines thereof, a display line group including [M · (k-1)+3]th display lines thereof, ..., a display line group including [M · (k-1)+M]th display lines thereof; and

an address component for dividing at least one of said plurality of subfields into M subsubfields, and in said subsubfields, respectively, performing~~, for the different display line groups,~~ a lighting mode setting or an extinction mode setting to each of the pixel cells for a different one of the display line groups, based on the multi-grayscale pixel data with respect to each of the pixel cells belonging to the corresponding display line group in said M subsubfields, and

a light emission sustaining component for weighting said display line groups with different brightness values, respectively.

2. (previously presented): The display panel drive according to claim 1, wherein the address component changes the display line groups on a field basis of the video signal for the setting in the M subsubfields.

3. (original): The display panel drive according to claim 1, wherein the multi-grayscale component further comprises dither addition component for generating a dither coefficient in a corresponding manner to any adjacent pixel position in a pixel cell group of i-line by j-column, and adding the result to the pixel data.

4. (original): The display panel drive according to claim 3, wherein the dither addition component changes, on a field basis of the video signal, the dither coefficient derived in the corresponding manner to the pixel position in the pixel cell group.

5. (previously presented): The display panel drive according to claim 1, wherein said sustain component causes only the pixel cells in the lighting mode in each of the subfields to emit light over a light emission period assigned to the corresponding subfield, wherein

a ratio among the light emission periods of the subfields is non-linear.

6. (original): The display panel drive according to claim 1, wherein the subfield having assigned with the shorter light emission period in one field display period is arranged toward the front.

7. (original): The display panel drive according to claim 5, wherein the subfield having assigned with the shorter light emission period in one field display period is arranged toward the front.

8. (original): The display panel drive according to claim 1, further comprising reset component for setting all of the pixel cells to the lighting mode in the subfield locating in the field front, wherein

the address component selectively shifts, to the extinction mode, the pixel cells in any one of the subfields in the subfields depending on the multi-grayscale pixel data.

9. (original): The display panel drive according to claim 5, further comprising reset component for setting all of the pixel cells to the lighting mode in the subfield locating in the field front, wherein

the address component selectively shifts, to the extinction mode, the pixel cells in any one of the subfields in the subfields depending on the multi-grayscale pixel data.

10. (original): The display panel drive according to claim 6, further comprising reset component for setting all of the pixel cells to the lighting mode in the subfield locating in the field front, wherein

the address component selectively shifts, to the extinction mode, the pixel cells in any one of the subfields in the subfields depending on the multi-grayscale pixel data.

11. (original): The display panel drive according to claim 1, wherein the subfield having assigned with the longer light emission duration in one field display period is arranged nearer to a head of the subfields.

12. (original): The display panel drive according to claim 5, wherein the subfield having assigned with the longer light emission duration in one field display period is arranged nearer to a head of the subfields.

13. (original): The display panel drive according to claim 1, further comprising reset component for setting all of the pixel cells to the extinction mode in the subfield locating in the field front, wherein

the address component selectively shifts, to the lighting mode, the pixel cells in any one of the subfields in the subfields depending on the multi-grayscale pixel data.

14. (original): The display panel drive according to claim 5, further comprising reset component for setting all of the pixel cells to the extinction mode in the subfield locating in the field front, wherein

the address component selectively shifts, to the lighting mode, the pixel cells in any one of the subfields in the subfields depending on the multi-grayscale pixel data.

15. (original): The display panel drive according to claim 11, further comprising reset component for setting all of the pixel cells to the extinction mode in the subfield locating in the field front, wherein

the address component selectively shifts, to the lighting mode, the pixel cells in any one of the subfields in the subfields depending on the multi-grayscale pixel data.

16. (currently amended): A display panel drive for tone-driving, responding to pixel data based on a video signal, a display panel in which pixel cells each carrying a pixel for a plurality of display lines are arranged, the display panel drive comprising:

a multi-grayscale component for deriving multi-grayscale pixel data by adding each different offset value to the pixel data each corresponding to a display group including [M · (k-1) +1]th display lines (where M is a natural number and K is a natural number of n/M or smaller) of the display panel, a display line group including [M · (k-1) +2]th display lines thereof, a display line group including [M · (k-1) +3]th display lines thereof, … and a display line group including [M · (k-1) +M]th display lines thereof; and~~; and~~

a light emission driving component for emitting the pixel cells depending on the multi-grayscale pixel data by assigning a different weighting in intensity to each of the display line groups ~~each differently in luminance~~.

17. (original): The display panel drive according to claim 16, wherein the light emission driving component includes:

an address component for performing, based on the multi-grayscale pixel data, a lighting mode setting or an extinction mode setting with respect to each of the pixel cells on a display line group basis; and

a sustain component for emitting only the pixel cells in the lighting mode over a predetermined period every time the setting to the display line groups is done.

18. (original): The display panel drive according to claim 17, wherein the address component changes an execution order of the setting to the display line groups on a field basis of the video signal.

19. (original): The display panel drive according to claim 16, wherein the multi-grayscale component further comprises dither addition component for generating a dither coefficient in a corresponding manner to any adjacent pixel position in a pixel cell group of i-line by j-column, and adding the result to the pixel data.

20. (original): The display panel drive according to claim 19, wherein the dither addition component changes, on a field basis of the video signal, the dither coefficient derived in the corresponding manner to the pixel